

Application No.: 10/594,161  
Amendment Dated: July 27, 2010  
Reply to Office Action of: April 27, 2010

MAT-8897US

**Remarks/Arguments:**

Claims 1-4 and 6-8 are presently pending. Claims 5 and 9 have been cancelled. Claims 1, 4, and 8 have been amended. Reconsideration is respectfully requested in view of the above amendments and the following remarks.

Applicants thank the Examiner and his Supervisor for the courtesy of the telephone interview conducted on July 27, 2010. During the interview, proposed amendments to claims 1, 4, and 8 were discussed. It was agreed that the proposed amendments overcome the cited art as it is currently being interpreted, and that further consideration and/or search will be performed following the filing of this response.

**Claim Rejections Under 35 U.S.C. § 102**

Page 2 of the Office Action sets forth "Claims 4 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Kwon et al., (US. Pub: 2005/0052137)." Applicants respectfully submit that these claims are allowable over the cited art for the reasons set forth below.

Applicants' invention, as recited by claim 4, includes features which are not disclosed, taught, or suggested by the cited art, namely:

...a second substrate...

...plural data electrodes disposed on the second substrate...

...wherein, from the central portion of the second substrate toward each side portion of the second substrate, each of the plural data electrodes is wider than a previous adjacent data electrode.

This means that, going from the central portion of the second substrate toward each side portion of the second substrate, each data electrode is wider than a previous

adjacent data electrode. This feature is found in the originally filed application at page 18, lines 1-13, and FIG. 7A. No new matter is added.

Applicants respectfully submit that the cited art fails to disclose at least the above features of claim 4.

Kwon is directed to a plasma display panel. As illustrated in FIG. 1, Kwon discloses a plasma display panel having a plurality of address electrodes 21 disposed on a second substrate 20. The address electrodes 21 each include an expanded end portion 21a. The width  $W_b$  of each expanded end portion 21a is greater than the width  $W_a$  of each middle portion of each address electrode 21. See Kwon at paragraphs [0035]-[0043], and FIG. 1.

As discussed during the interview, Kwon fails to disclose that adjacent address electrodes 21 get continually wider going from the center of the second substrate 20 toward each side of the second substrate 20. To the contrary, Kwon discloses that all address electrodes 21 except the outermost electrodes have the same width  $W_a$ . Thus, any of the middle electrodes will always be adjacent another electrode having the same width. This is different from the claimed invention because claim 4 requires that, going from the central portion of the second substrate toward each side portion of the second substrate, each of the plural data electrodes is wider than a previous adjacent data electrode.

Thus, Applicants respectfully submit that Kwon fails to disclose the features of "from the central portion of the second substrate toward each side portion of the second substrate, each of the plural data electrodes is wider than a previous adjacent data electrode," as recited in claim 4.

It is because Applicants' invention includes the above features that the following advantages are achieved. "The discharging characteristics of the discharge cells are made to vary gradually by designing the panel in this way. Therefore, deterioration of display quality by discontinuity of the brightness does not occur." See the originally filed application at page 18, lines 6-9.

Accordingly, for the reasons set forth above, claim 4 is allowable over the cited art. Withdrawal of the rejection and allowance of claim 4 is respectfully requested.

Claim 7 includes all of the features of claim 4, from which it depends. Thus, claim 7 is also allowable over the cited art for at least the reasons set forth above with respect to claim 4. Withdrawal of the rejection and allowance of claim 7 is respectfully requested.

**Claim Rejections Under 35 U.S.C. § 103**

Page 4 of the Office Action sets forth "Claims 1-3, 6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida (JP: 2003-308783)...in view of Kwon." Page 7 of the Office Action sets forth "Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kwon...in view of Uchida." Applicants respectfully submit that these claims are allowable over the cited art for the reasons set forth below.

Claims 5 and 9 have been cancelled, thus obviating the rejections of those claims.

Applicants' invention, as recited by claim 1, includes features which are not disclosed, taught, or suggested by the cited art, namely:

...a second substrate...

...plural data electrodes disposed on the second substrate...at least one data electrode of the data electrodes including a middle portion having a first constant width, opposite end portions having a second constant width, and

respective tapered portions extending from the middle portion to each of the end portions.

This means that at least one of the data electrodes has tapered portions extending from a middle portion having a first constant width to end portions having a second constant width. This feature is found in the originally filed application at page 12, lines 14-23, and FIG. 4C. No new matter is added.

Applicants respectfully submit that the cited art fails to disclose at least the above features of claim 1.

Uchida is directed to a plasma display panel. As illustrated in FIGS. 1 and 3, for example, Uchida discloses a plasma display panel having a plurality of rear electrodes 1A and 1C. In FIG. 1, rear electrodes 1A and 1C are wide at a top portion and narrow at a bottom portion. Alternatively, in FIG. 3, rear electrodes 1C taper from a wide top portion to a narrow bottom portion. Additionally, as illustrated in FIG. 5, for example, Uchida discloses a plasma display panel having a plurality of rear electrodes 1E, 1F, 1G, and 1H. Rear electrodes 1E-1H are arranged such that they decrease in width as they go from the left side to the right side of the plasma display panel.

As discussed during the interview, Uchida fails to disclose, teach, or suggest rear electrodes 1A-1H having tapered portions extending between a constant-width middle portion and constant-width end portions. Uchida is different from the claimed invention because claim 1 requires that at least one of the data electrodes include a middle portion having a first constant width, opposite end portions having a second constant width, and respective tapered portions extending from the middle portion to each of the end portions.

Applicants respectfully submit that Kwon fails to make up for the deficiencies of Uchida with respect to claim 1. Kwon fails to disclose, teach, or suggest address electrodes 21 including tapered portions extending to the expanded end portions 21a of

the electrodes. To the contrary, Kwon discloses that all address electrodes 21 have a stepwise change in width, instead of a tapered portion. This is different from the claimed invention because claim 1 requires that at least one of the data electrodes include a middle portion having a first constant width, opposite end portions having a second constant width, and respective tapered portions extending from the middle portion to each of the end portions.

Applicants submit that none of the cited references, either alone or in combination, discloses bridging between two constant-width sections of an electrode with a tapering portion. To the contrary, both Uchida and Kwon disclose electrodes having two constant-width sections. See electrodes 1A and 1B of Uchida; See electrodes 21 of Kwon. In both of these disclosures, the width of the electrode is changed in a stepwise fashion. Neither Uchida nor Kwon discloses, teaches, or suggest changing width between two constant-width sections in a tapered fashion. Thus, Applicants respectfully submit that Uchida in view of Kwon fails to disclose, teach, or suggest the features of "at least one data electrode of the data electrodes including a middle portion having a first constant width, opposite end portions having a second constant width, and respective tapered portions extending from the middle portion to each of the end portions," as recited in claim 1.

It is because Applicants' invention includes the above features that the following advantages are achieved. "If the width of data electrode 10D is varied continuously, the discharging characteristics of discharge cells 15 also vary continuously. In consequence, deterioration in quality by nonuniformity of the brightness or the like does not occur." See the originally filed application at page 12, lines 20-23.

Accordingly, for the reasons set forth above, claim 1 is allowable over the cited art. Withdrawal of the rejection and allowance of claim 1 is respectfully requested.

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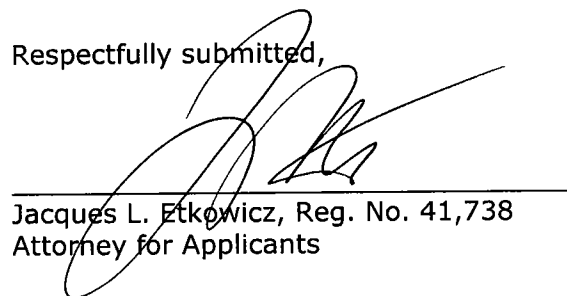
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Claims 2, 3, and 6 include all of the features of claim 1, from which they depend. Thus, claims 2, 3, and 6 are also allowable over the cited art for at least the reasons set forth above with respect to claim 1. Withdrawal of the rejection and allowance of claims 2, 3, and 6 is respectfully requested.

Claim 8, while not identical to claim 1, includes features similar to the allowable features of claim 1 discussed above. Thus, claim 8 is also allowable over the cited art for at least the reasons set forth above with respect to claim 1. Withdrawal of the rejection and allowance of claim 8 is respectfully requested.

In view of the amendments and arguments set forth above, the above-identified application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,



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